

### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

CONFIRMATION NO. ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 8082 09/988,109 51964 11/19/2001 Helmut Auweter 26474 7590 09/23/2003 **KEIL & WEINKAUF EXAMINER** 1350 CONNECTICUT AVENUE, N.W. EVANS, CHARESSE L WASHINGTON, DC 20036 **ART UNIT** PAPER NUMBER 1615 DATE MAILED: 09/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

•		
•	Application No.	Applicant(s)
Office Action Summary	09/988,109	AUWETER ET AL.
	Examiner	Art Unit
	Charesse L. Evans	1615
The MAILING DATE of this communication appears on the cover she t with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM		
<ul> <li>THE MAILING DATE OF THIS COMMUNICATION.</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>		
Status		
1) Responsive to communication(s) filed on <u>14 July 2003</u> .		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	is action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims		
Disposition of Claims 4)⊠ Claim(s) <u>1-16 and 28-33</u> is/are pending in the	application	
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-16 and 28-31</u> is/are rejected.		
7)⊠ Claim(s) <u>32 and 33</u> is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)

Art Unit: 1615

#### DETAILED ACTION

### Action Summary

Acknowledgement is made of the receipt of applicant's request for extension of time and amendment and remarks, filed July 14, 2003.

Acknowledgement is made of applicant's selection of Group I, claims 1 to 11 and 31 to 33, pursuant to the election and restriction requirement of May 12, 2003. Applicant's argument regarding claims 12-16 and 28 to 30 is persuasive. Claims 17-27 and 34-40 have been cancelled.

Claims 1-16 and 28-33 are active in this action.

# Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the

Art Unit: 1615

subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Museaus et al (EPO 0 498 824 B1). The claims are directed to a process for producing solid preparations of active compound.

Museaus teaches a process of preparing powdered solid which is dispersible in water or in an aqueous solution in the form of discrete microparticles (column 1, lines 1-7). Hydrocolloids that can be used in the process include pectins, gelatins, other proteinaceous materials, soybean protein, methyl cellulose and modified starches (column 4, lines 7-24). The suspension is finely divided and dried (column 4, lines 30-32). The carotenoids used in the referenced process include beta-carotene, lycopene,

Art Unit: 1615

beta-apo-8-carotenal, lutein, canthaxanthin, astaxanthin, and citranaxanthin (column 3, lines 54 through column 4, line 3).

The active compounds were present in amounts ranging from 4.5% to 26.0% be weight of the resulting suspension (see Examples 7, 12 and 13).

Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al (EP 0937412 A1). The claims are directed to an oily suspension comprising preparations obtained by the process for producing solid preparations of active compound.

Stein teaches preparations of carotenoid preparations which are pulverized, wherein the active ingredient is finely divided. The process includes forming a suspension of the active in an organic solvent optionally containing an antioxidant and an oil (Abstract and paragraph 0020). Carotenoids used in the referenced invention include beta-carotene, beta-apo-8-carotenal, astaxanthin, canthaxanthin, lutein, lycopene, or citranaxathin (column 2, paragraph 0011). Other colloids include gelatin, starch, starch derivatives, dextrin, pectin, gum arabic and casein (column 3, paragraph 0017). Once the solvent is removed from the heated matrix solution, a pulverous composition can be isolated by spray drying or powder catch techniques (paragraph 0028). The active ingredient is present from about 0.5 to 25% be weight (claim 11). The particle size of the active ingredient is around 0.4 microns (claim 2).

Art Unit: 1615

The cited prior art does not expressly disclose that the suspension is flocculated, however, it is the position of the examiner that this feature does not impart a patentable distinction over the prior art. Flocculating means to cause deposition. In both references there is a precipitate or deposition of the proteinaceous material that contains the active ingredient before the solvent or aqueous material is added to the composition. Accordingly, it would be obvious to one of ordinary skill in the art to extract this precipitate

# Allowable Subject Matter

Claims 32 and 33 are objected to as being dependent upon a rejected base claim, but may be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charesse L. Evans whose telephone number is 703-308-6400. The examiner can normally be reached on Monday-Thursday 7:00a - 4:30p; Alternating Fridays 7:00a - 3:30p.

Art Unit: 1615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 703-308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Charesse L. Evans Examiner Art Unit 1615

September 21, 2003

THURMAN K. PAGE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600